PATENT COOPERATION TREATY

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Applicant's or ag	ent's file refer	word2°	18		FOR FUR	THER ACTION ph 2 below
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International Pat A47L9/16, B0		ion (IPC) or b	oth nation	al classification	and IPC	
Applicant DYSON LIMI		· · · · · · · · · · · · · · · · · · ·	1			
 This opin 	nion contair	ns indicatio	ns relati	ng to the foll	owing items	
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Name and mailing address of the ISA:

Authorized Officer

European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465

Papadimitriou, S

Telephone No. +49 89 2399-2760



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

IAP9 Rec'd PCT/PTO 26 JAN 2006 international application No. PCT/GB2004/003414

_	Вох	No. I Basis of the opinion	
1.		regard to the language , this opinion has been established on the basis of the international application anguage in which it was field, unless otherwise indicated under this item.	on in
	I	This opinion has been established on the basis of a translation from the original language into the foll language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).	lowing
2.	With nece:	regard to any nucleotide and/or amino acid sequence disclosed in the international application an ssary to the claimed invention, this opinion has been established on the basis of:	d
	a. typ	pe of material:	
		a sequence listing	•
		table(s) related to the sequence listing	
	b. for	mat of material:	
		in written format	
		in computer readable form	
	c. tim	e of filing/furnishing:	
		contained in the international application as filed.	
		filed together with the international application in computer readable form.	
		furnished subsequently to this Authority for the purposes of search.	
3.	h C	n addition, in the case that more than one version or copy of a sequence listing and/or table relating to as been filed or furnished, the required statements that the information in the subsequent or addition opies is identical to that in the application as filed or does not go beyond the application as filed, as ppropriate, were furnished.	thereto nal
4.	Additi	onal comments:	

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2004/003414

		,2.
Во	x No. II	Priority
1: 🖾	The fo	llowing document has not been furnished:
	\boxtimes	copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).
		translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).
		quently it has not been possible to consider the validity of the priority claim. This opinion has neless been established on the assumption that the relevant date is the claimed priority date.
2. 🗆	has be	pinion has been established as if no priority had been claimed due to the fact that the priority claim en found invalid (Rules 43 <i>bis</i> .1 and 64.1). Thus for the purposes of this opinion, the international ate indicated above is considered to be the relevant date.
3 74	ditional c	shear vations if necessary

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2004/003414

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability								
The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:								
	the entire international application,							
\square	claims Nos. 23							
because:								
	the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):							
Ø	the description, claims or drawings (indicate particular elements below) or said claims Nos. 23 are so unclear that no meaningful opinion could be formed (specify):							
	see separate sheet							
	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.							
	no international search report has been established for the whole application or for said claims Nos.							
	the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:							
	the written form		has not been furnished					
			does not comply with the standard					
	the computer readable form		has not been furnished					
			does not comply with the standard					
	the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.							
	See separate sheet for further details							

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or prindustrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-22,24

No:

Inventive step (IS)

Yes: Claims

1-22,24

No:

: Claims

Claims

Industrial applicability (IA)

Yes: Claims

1-22,24

No: Claims

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. Independent claim 23

Claim 23 only contains references to the description and/or the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here.

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. State of the art

Reference is made to the following documents:

D1: WO-A-03030702 D2: US-A-2001042283

2. Independent claim 1

Closest prior art: Document D1 showing a cyclonic separator (7) comprising a separating chamber (cf. figs. 3 and 4) an inlet conduit (13) and an outlet conduit (14). The outlet conduit (14) comprises perforated portions equipped with holes (18) which are said to prevent noise and to avoid pressure drops.

Distinguishing features: the outlet conduit (20) is equipped with a plurality of grooves (24) formed in an interior surface of the outlet conduit and extending in the same direction as the longitudinally axis (26) of the outlet conduit.

Technical effect: reduction in the amount of noise generated by the cyclonic apparatus during use; pressure recovery in the cleaned airflow passing through the outlet conduit.

Objective technical problem: an alternative noise suppression and pressure recovery arrangement to that of D1.

Inventive step: D2 only teaches to provide the exterior of an outlet pipe (143) with spiral grooves to enhance centrifugal action (cf. par. 38).

Industrial applicability: The claimed apparatus is susceptible of use in an industrial environment.

Conclusion: Consequently, the subject-matter of independent claim 1 complies with the provisions of Article 33, paragraphs (2)(3)(4) PCT.

3. Dependent claims 2-22,24

Dependent claims 2-22 and 24, when appendant on any of claims 1-22, define various embodiments of the apparatus specified in independent claim 1 and as such also comply with the provisions of Article 33 paragraphs (2)(3)(4) PCT.

Re Item VII

Certain defects in the international application

1. All claims

The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

2. Independent claim 1

Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

3. <u>Description</u>

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/GB2004/003414